



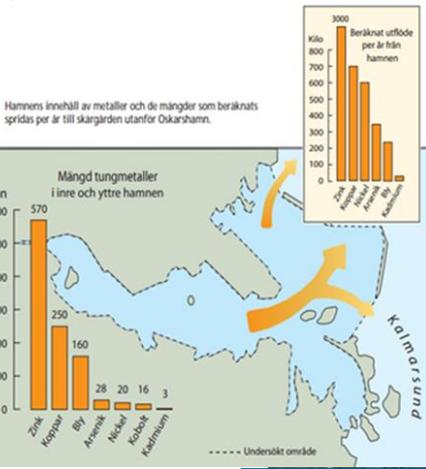
Remediation of Oskarshamn Hamn

Bart Van Renterghem – Envisan NV

Past, present and future...



REMEDIATION OSKARSHAMN HAMN



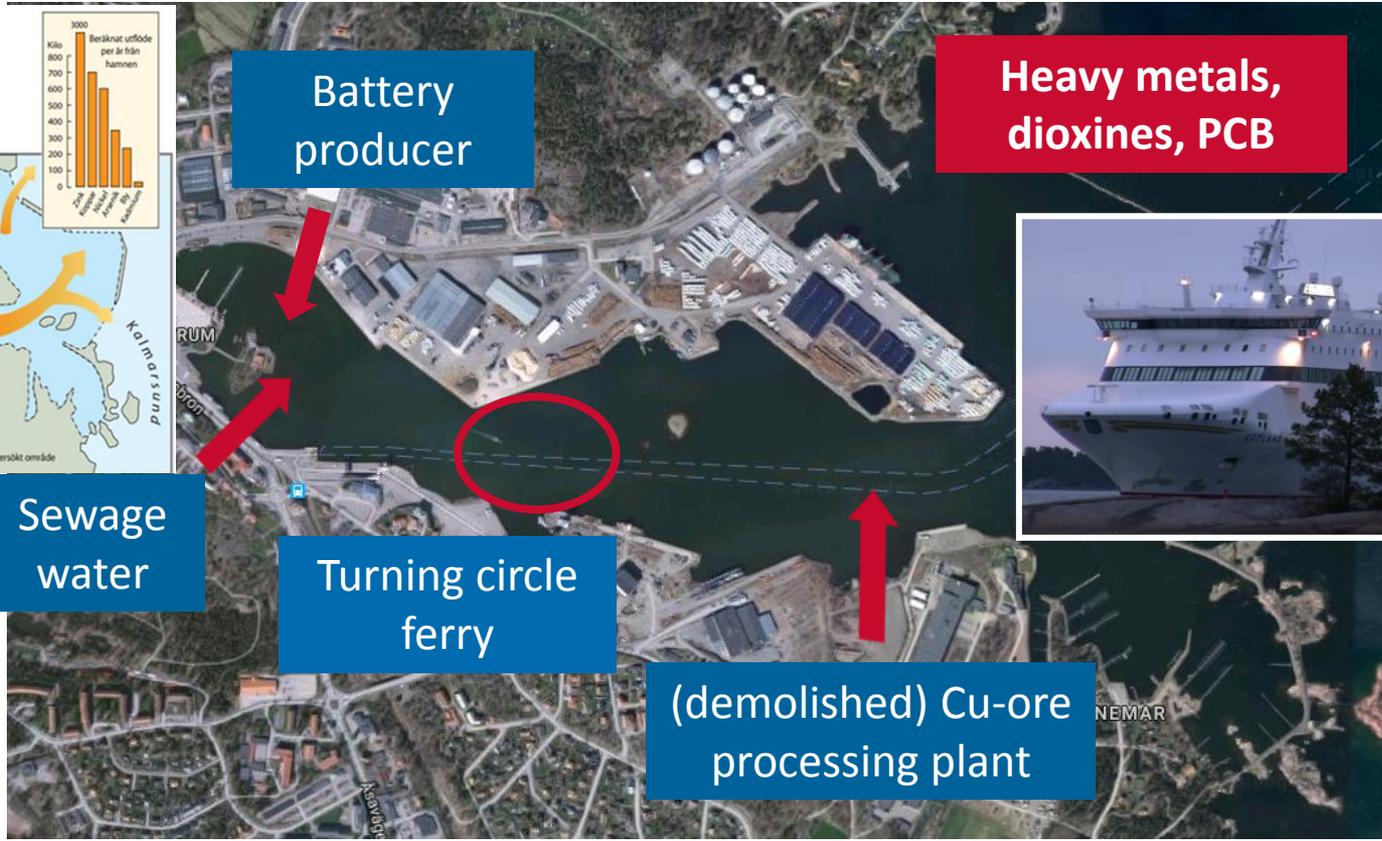
Battery producer

Heavy metals, dioxines, PCB

Sewage water

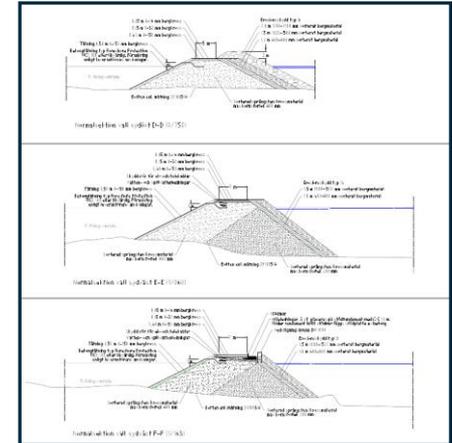
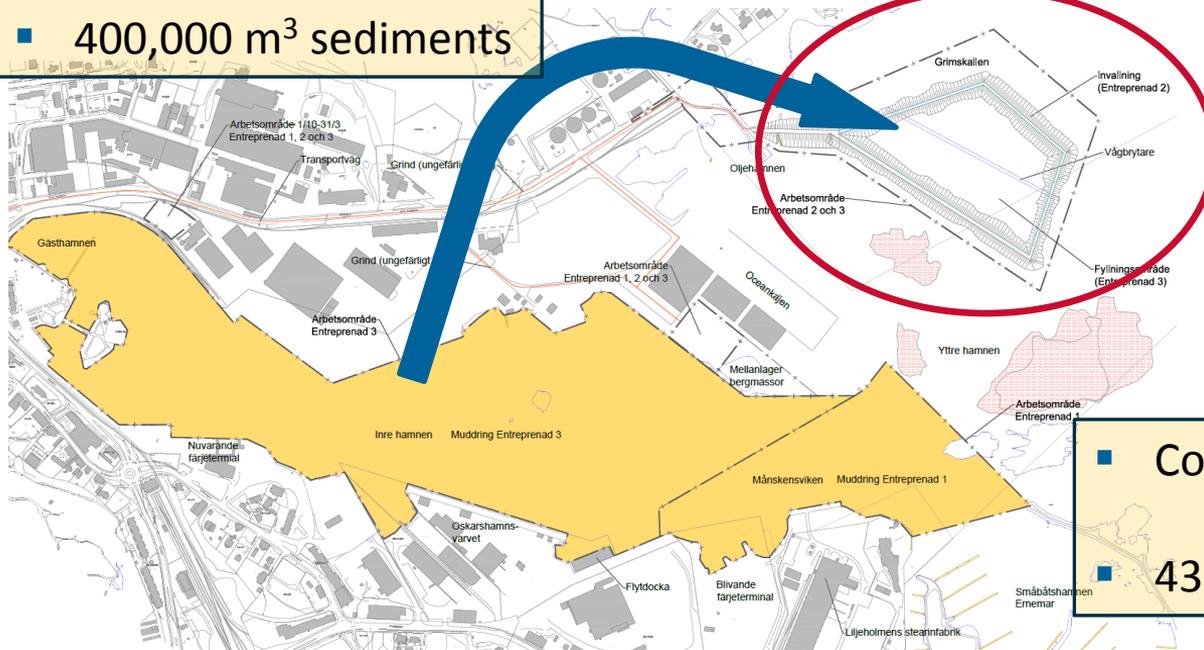
Turning circle ferry

(demolished) Cu-ore processing plant



Initial remediation plan – 2000 - 2014

- Harbour extension
- 400,000 m³ sediments

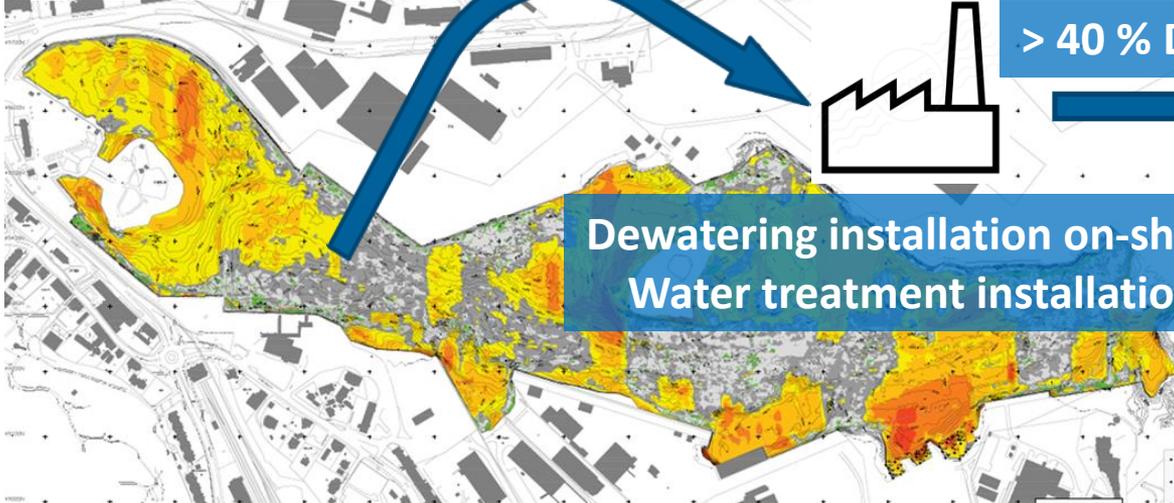


- Confined disposal area (350 m x 250 m)
- 437,900 m³ rock works

Final remediation plan - 2014



400,000 m³ sediment
@ 5 % DS



Dewatering installation on-shore
Water treatment installation



> 40 % DS sediment



Mono landfill

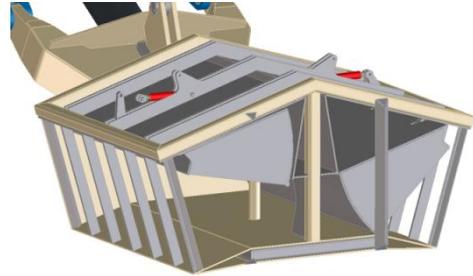


Hydraulic dredging

- ca. 320,000 in situ m³
- Layers from 0,1 to 5 m
- Target of min 10 % DS

Mechanical dredging

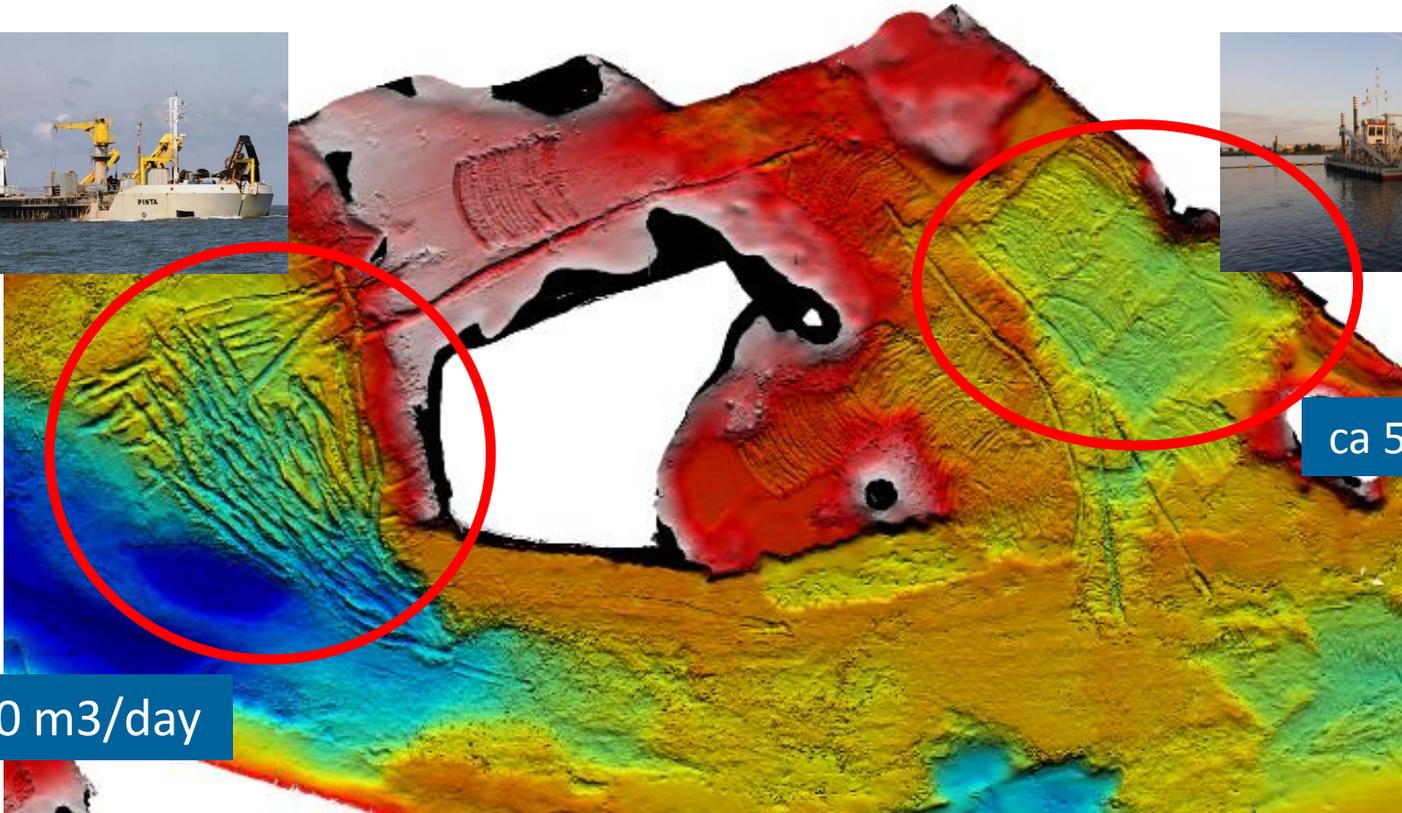
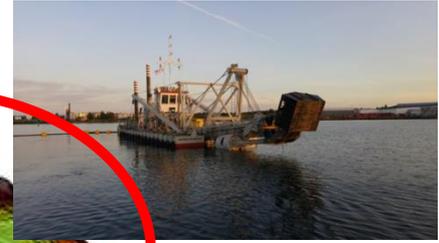
- ca. 70,000 in situ m³



REMIEDIATION OSKARSHAMN HAMN

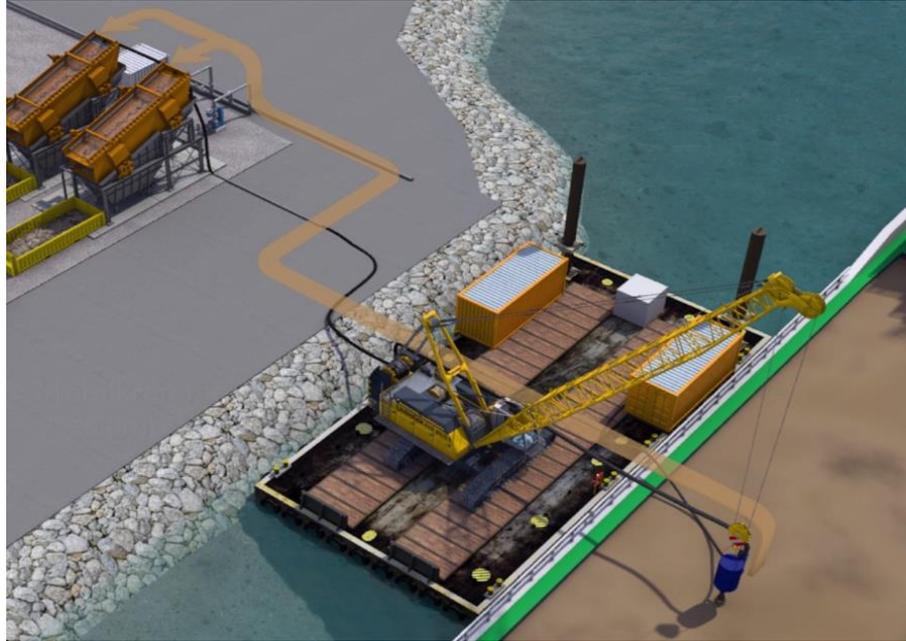


REMEDIATION OSKARSHAMN HAMN



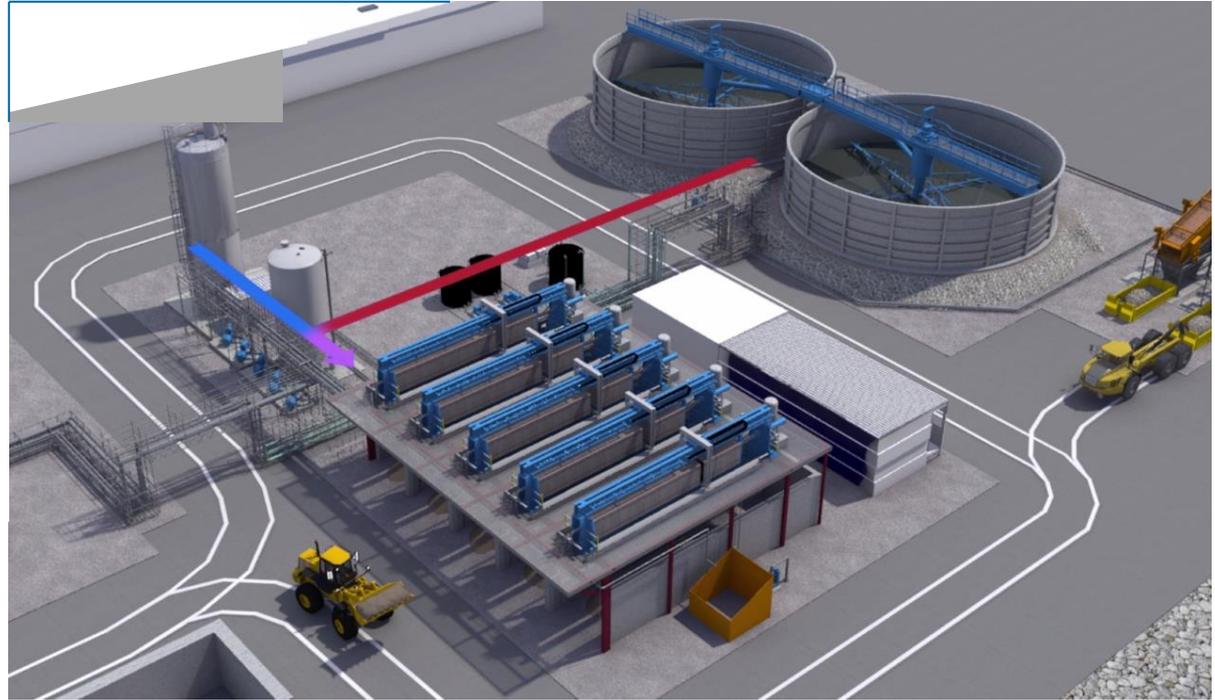
ca 1000 m³/day

ca 500 m³/day



Sediment reception & sieving

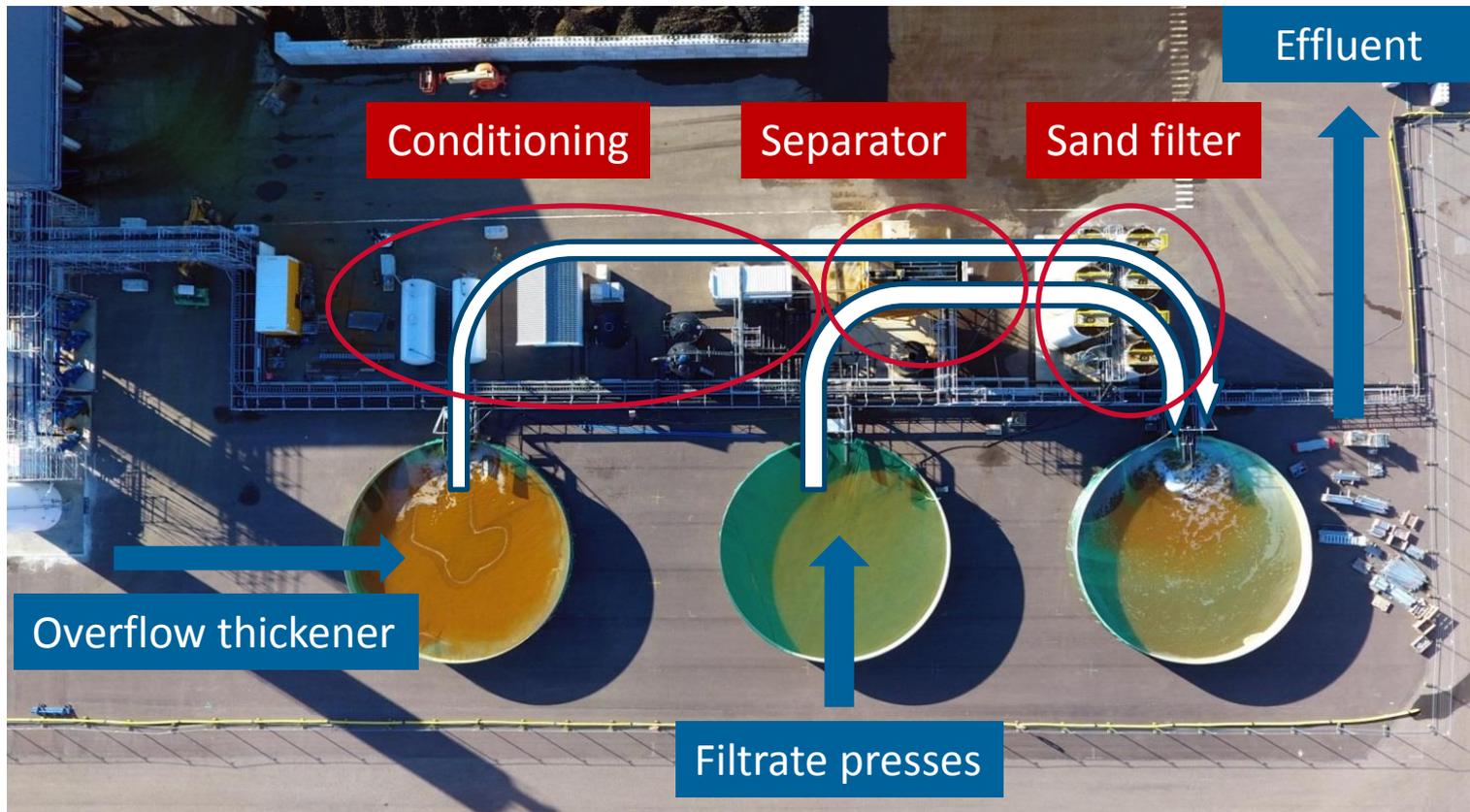
Dewatering from 10 % DS to > 40 % DS



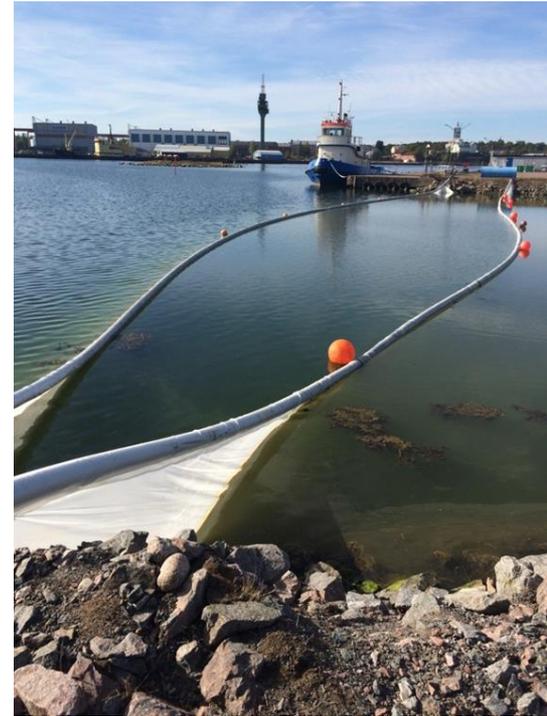
Site impressions...



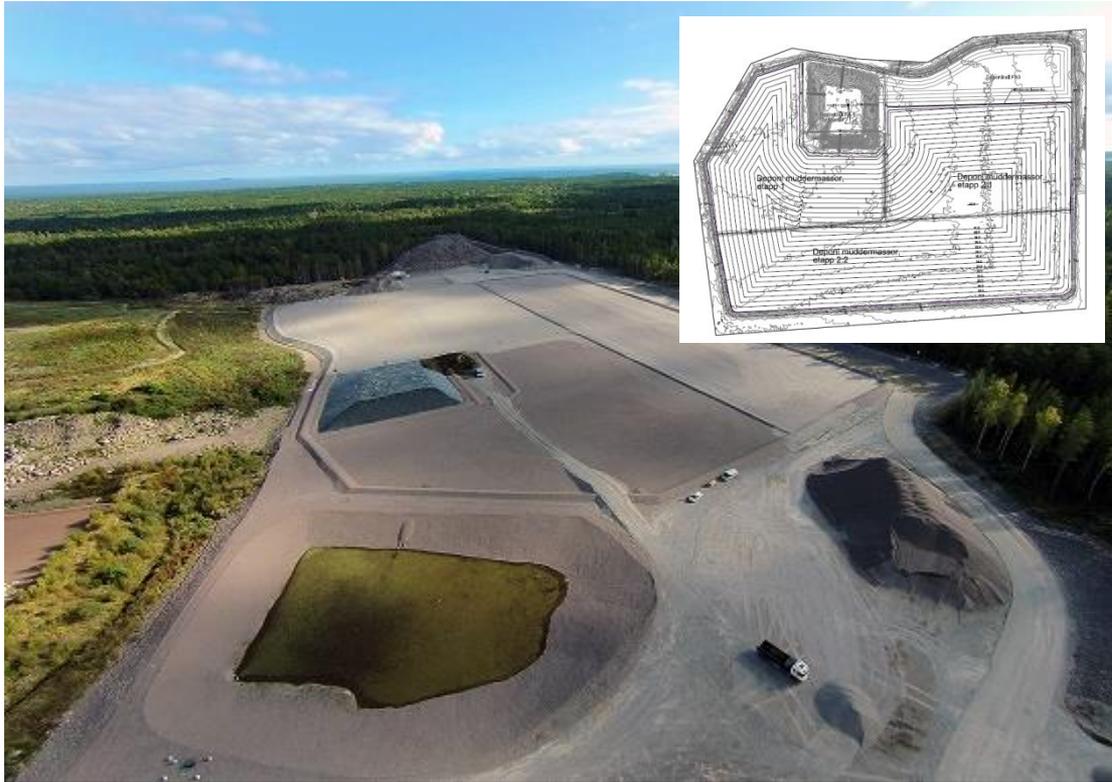
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Water treatment installation



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Engineering, construction & start-up

Jan – Sept 2016

Production

Oct 16

Closing

Nov 16



Start-up

March 17

2017

Production

April – October 2017

Closing

Nov 17

Start-up

March 18



Production

April – September 2018

Demob

Sept – Dec 2018

